

REMARKS

Claims 1-3, 9-10, and 14-21 are pending in the application, with claims 17-21 being withdrawn from consideration. Claims 1-2, 10, and 15 have been amended and claims 7-8 and 11-13 have been canceled by this amendment. Reconsideration and allowance of Applicants' claims are respectfully requested.

Drawing Objections

The drawings were objected to in the Office Action mailed April 13, 2006. The Examiner stated that the term "TDR" in Figure 1 was unnecessary and that Figure 3 showed a cross section of a gasket without showing cross sectional shading. Appropriate correction has been made in the enclosed replacement drawing sheets. Therefore, it is respectfully requested that this objection be withdrawn.

Specification Objections

The abstract was objected to because it included the phrase "is provided" on line 1. The phrase "is provided" has been removed. Therefore, it is respectfully requested that this objection be withdrawn.

Claim Objections

Claims 2 and 15 were objected to due to an informality. In particular, claims 2 and 15 recited the term "wire" rather than "wires." Claims 2 and 15 have been amended to correct this typographical error. Therefore, it is respectfully requested that this objection be withdrawn.

Double Patenting

Claims 1, 2, and 9 were rejected under the judicially created doctrine of double patenting as being unpatentable over claim 5 of U.S. Patent No. 6,879,256 (Redfern) in view of Minor (U.S. Patent No. 5,581,019).

As amended, independent claim 1 recites, among other things, a watertight door seal integrity verification assembly that has a display to indicate a gasket compression status "wherein the display comprises a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, and wherein the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression." Neither Redfern nor Minor, alone or in combination, disclose or suggest at least these features of amended claim 1. Therefore, it is respectfully requested that this rejection be withdrawn.

Redfern is directed to a seal compression indication system that includes a watertight door with a gasket in a channel around the periphery of the door. Col. 1, lines 56-59. A plurality of switches are placed between the channel and the gasket and the switches are closed when the door is closed and the gasket is fully compressed. Col. 1, lines 61-64. A display indicates whether the gasket is sufficiently compressed or not. Col. 1, lines 64-65. In particular, the switches are two state switching devices and are sized to electrically close once the gasket is compressed sufficiently by dogs on the door. Col. 2, lines 56-60. The switches are wired in series and the output of the switches is wired to indicator lights in an easily visible area of the

door. Col. 2, lines 63-65. When all the series-connected switches are activated, an electrical circuit is completed and lights a green LED. Col. 3, lines 1-4. If at least one switch is not activated, then a red LED is lit. Col. 3, lines 4-6.

However, among other things, Redfern does not disclose or suggest a display that includes a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, where the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression. Rather, Redfern teaches a display that is responsive to the closure of the switches and indicates whether the gasket was sufficiently compressed or not by indicating whether all of switches are closed or not. Col. 1, lines 61-65; col. 2, line 63 to col. 3, line 6. Thus, the display of Redfern only provides an overall indication of whether all the switches are closed or whether at least one switch is not closed. Redfern does not and indeed, because the switches are wired in series, cannot provide a display that includes a visual representation of the gasket compression status at a plurality of locations along the periphery of the watertight door.

Minor does not remedy the noted deficiencies of Redfern with respect to claim 1. In particular, Minor fails to describe or suggest a display that includes a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, where the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression. Instead, Minor is directed to a gasket suitable for use as a seal monitoring gasket. The gasket includes an electrically conductive

element embedded within the gasket body and electrical leads for connecting the conductive element to an electrical monitoring apparatus. Col. 4, lines 45-49. Minor describes the electrical monitoring apparatus as providing some quantitative measurement of an electrical property of the conductive element. Col. 5, lines 57-59. In particular, Minor describes the preferred monitoring apparatus as an analog or digital meter or signal generating device which simply provides a measure of conductivity, impedance or other property of the gasket. Col. 5, lines 60-63.

Also, because Minor does not use switches to indicate gasket compression status, combining Minor with Redfern would impermissibly change the principle of operation of Redfern described above.

Claims 1, 2, and 9 each depend from claim 1, and are believed to be allowable for at least the reasons given for claim 1.

35 U.S.C. § 102 Rejections

Claims 10 and 14 were rejected under 35 U.S.C. 102(b) as being anticipated by Minor.

As amended and similarly to claim 1, independent claim 10 recites, among other things, a watertight door seal integrity verification system that has a display to indicate a gasket compression status "wherein the display comprises a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, and wherein the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression." As discussed above, Minor does not describe or

suggest at least these features of amended claim 10. Therefore, it is respectfully requested that this rejection be withdrawn.

Claim 14 depends from claim 10, and is believed to be allowable for at least the reasons given for claim 10.

35 U.S.C. § 103 Rejections

Claims 1, 2, and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rowe (U.S. Patent No. 5,553,871) in view of Minor.

As amended, independent claim 1 recites, among other things, a watertight door seal integrity verification assembly that has a display to indicate a gasket compression status "wherein the display comprises a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, and wherein the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression." Neither Rowe nor Minor, alone or in combination, describe or suggest at least these features of amended claim 1. Therefore, it is respectfully requested that this rejection be withdrawn.

Rowe is directed to a fluidtight door gasket using a silicone rubber material in a specifically proportioned rectangular-parallel-epipediod shape having two 45 degree chamfers and a lengthwise intermediate semicylindrical groove. However, among other things, Rowe does not disclose or suggest a display that includes a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the

periphery the watertight door, where the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression. In fact, Rowe is completely devoid of any reference to a display that indicates a gasket compression status.

As discussed above, Minor does not remedy the noted deficiencies of Rowe with respect to claim 1.

Claims 2 and 9 depend from claim 1, and are believed to be allowable for at least the reasons given for claim 1.

Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Rowe in view of Minor and further in view of Wilson (U.S. Patent No. 5,705,984).

As amended, independent claim 1, from which claim 3 depends, recites, among other things, a watertight door seal integrity verification assembly that has a display to indicate a gasket compression status "wherein the display comprises a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, and wherein the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression." Neither Rowe, Minor nor Wilson, alone or in combination, describe or suggest at least these features. Therefore, it is respectfully requested that this rejection be withdrawn.

As discussed above, Rowe does not disclose or suggest a display that includes a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, where the visual representation

of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression.

As discussed above, Minor does not remedy the noted deficiencies of Rowe with respect to claim 1.

Wilson, which was cited for its teaching of a TDR having a coaxial transmission line, does not remedy the noted deficiencies of Rowe and Minor. In particular, Wilson does not disclose or suggest a display that includes a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, where the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression. Rather, Wilson is directed to a passive intrusion detection system using an RF energy source transmitting energy into a buried cable along a path that corresponds to a perimeter to be monitored. TDR is used to identify an intruder.

Claims 15 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Minor in view of Wilson.

Amended independent claim 1, from which claims 15 and 16 depend, recites, among other things, a watertight door seal integrity verification assembly that has a display to indicate a gasket compression status "wherein the display comprises a visual representation of the watertight door and a visual representation of the gasket compression status at a plurality of locations along the periphery the watertight door, and wherein the visual representation of a location having an improper gasket compression is distinguished from the visual representation of a location not having an improper gasket compression." As discussed above, neither Minor

nor Wilson, alone or in combination, describe or suggest at least these features of amended claim

1. Therefore, it is respectfully requested that this rejection be withdrawn.

It is respectfully submitted that all claims are in condition for allowance, and early notice of the same is respectfully solicited. Please apply the Petition for Extension of Time (1 month) fee, as well as any other charges or credits, to Deposit Account No. 50-0958. If any questions remain, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

Date: 19 July 2006



Scott R. Boalick
Reg. No. 42,337

Customer No. 38092
Office of Counsel (Patents)
Naval Surface Warfare Center
Carderock Division
Code 004
9500 MacArthur Blvd.
West Bethesda, MD 20817-5700

(301) 227-1835

Applicant : Stephen A. Mastro et al.
Serial No. : 10/654,962
Filed : September 5, 2003
Page : 3 of 15

Attorney's Docket No.: 84155

IN THE DRAWINGS

The enclosed two sheets of drawings replace the two sheets of drawings filed on September 5, 2003.